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Item 4 of the provisional agenda

ECONOMIC COMMISSION FOR AFRICA

Nineteenth session of the Commission and tenth meeting of the Conference of Ministers

Addis Ababa, Ethiopia, 24-28 May 1984

Item 6 of the provisional agenda

EXTRACTS FROM

1. MEDIUM-TERM PLAN FOR THE PERIOD 1984-1989

(General Assembly, Official Records: Thirty-seventh Session, Supplement No. 6 (A/37/6), United Nations, New York, 1983)

and

2. ADDENDUM TO THE MEDIUM-TERM PLAN FOR THE PERIOD 1984-1989

(General Assembly, Official Records: Thirty-seventh Session, Supplement No. 6 (A/37/6/Add.1), United Nations New York, 1984)

M84-2216

CHAPTER 10. DEVELOPMENT ISSUES AND POLICIES

III. REGIONAL PROGRAMMES

PROGRAMME 3. DEVELOPMENT ISSUES AND POLICIES IN AFRICA (ECA)

A. Subprogrammes

SUBPROGRAMME 1. SOCIO-ECONOMIC ANALYSIS, PLANNING AND PROJECTIONS

(a) Legislative authority

10.81 The legislative authority for this subprogramme is Commission resolutions 368 (XIV), 257 (XII), 260 (XII), 332 (XIV), 384 (XV), 398 (XV) on the Lagos Plan of Action and General Assembly resolution 3508 (XXX).

(b) Objectives

10.82 The objectives of this subprogramme are:

General objectives of the secretariat: to continuously assess the economic and social situation of African countries and assist member States in creating and improving their own national mechanisms for review and appraisal of development policies and programmes; and to identify appropriate policy measures and devise planning and programming techniques relating to sectoral planning, regional and subregional co-ordination of plans and contingency planning for specific crises.

(c) Problem addressed

10.83 The formulation and implementation of effective development programmes is still hampered by the lack of concise information on the economic and social situation existing in individual member States and the region as a whole. Adjustments to improve existing policies can only take place on the basis of a comprehensive assessment of implementation of economic and social policies. Furthermore, the economic and administrative structures in African countries hardly meet the requirements of development; planning systems of African countries need to be strengthened.

(d) Strategy for the period 1984-1989

10.84 Activities under this subprogramme are of a continuous nature. During the plan period, the Survey of Economic and Social Conditions in Africa will be published every year. Every two years the Survey will serve as a basis for the review and appraisal of the implementation of the International Development Strategy for the 1980s and of the Lagos Plan of Action. Existing studies will be expanded to cover a larger number of African countries, and deal with the following: use of social indicators in planning: sectoral analysis for most of the African

countries; subregional and regional co-operation in planning; forecasting and warning systems in individual countries to anticipate and take measures to counteract short-term fluctuations, bottlenecks and other dislocations in their economies.

SUBPROGRAMME 2. FISCAL, MONETARY AND FINANCIAL ISSUES AT THE NATIONAL LEVEL

(a) Legislative authority

10.85 The legislative authority for this subprogramme is General Assembly resolution 2626 (XXV) and Commission resolutions 238 (XI) and 398 (XV).

(b) Objectives

10.86 The objectives of this subprogramme are:

(i) Intergovernmental objectives: to gain better understanding of the interaction of fiscal and monetary mechanisms and balance-of-payments movements; to formulate sound fiscal, monetary and financial policies and to ensure the optimal use of available financial resources for development;

(ii) General objectives of the secretariat: to generate information on and provide analysis of the fiscal and monetary situation of countries, including their balance-of-payment, with an emphasis on the improvement of national financial institutions for the integration of rural components of the economy.

(c) Problem addressed

10.87 Generally, there is inadequate level of financial resources for development in African countries; fiscal and monetary policies do not provide enough incentives for the optimal use of the existing resources. Moreover, financial institutions are not organized to give Governments early signals of impending difficulties and do not respond to the needs of the rural majority of the population.

(d) Strategy for the period 1984-1989

10.88 Research will be conducted on the following subjects: the effectiveness of the traditional tools of monetary management in Africa and the link between the indigenous and modern money markets; the gaps in agricultural credit and the mobilization of resources in rural areas; links between fiscal and monetary policies and the balance-of-payments; housing and industrial finance. It is also planned to review and assess the tax base and eventually to propose ways and means to improve it in a number of African countries.

SUBPROGRAMME 3. LEAST DEVELOPED COUNTRIES

(a) Legislative authority

10.89 The legislative authority for this subprogramme is General Assembly resolutions 36/194, 34/203 and 34/210; Commission resolutions 238 (XI), 353 (XIV) and 397 (XV); report of the Conference on the Problems and Prospects of the African Least Developed Countries, March 1980; and the Lagos Plan of Action, chapter X.

(b) Objectives

10.90 The objectives of this subprogramme are:

(i) Intergovernmental objective: to make a concerted effort to accelerate the development of the least developed countries;

(ii) General objectives of the secretariat: to assess and review the implementation of the Substantial New Programme of Action for the Least Developed Countries in the African region.

(c) Problem addressed

10.91 Least developed countries in Africa are facing especially difficult conditions since most of them are situated in drought-prone areas and are land-locked. During the 1970s, their economic development fell behind the African average and was characterized by stagnation and, in some cases, decline. Their prospects are bleak unless their development policies are significantly improved and greatly expanded flows of aid are secured.

(d) Strategy for the period 1984-1989

10.92 Continued in-depth studies of the economies of the least developed countries are planned. The institutional arrangements for the follow-up to the 1981 United Nations Conference on the Least Developed Countries will have been firmly established to enable the monitoring and periodic review and evaluation of the Substantial New Programme of Action. Technical assistance will be extended in the form of substantive support and advisory services in planning, programming and project preparation.

SUBPROGRAMME 4. POLICIES, INSTITUTIONS AND TECHNICAL ASSISTANCE FOR ECONOMIC CO-OPERATION

(a) Legislative authority

10.93 The legislative authority for this subprogramme is General Assembly resolutions 3517 (XXX) and 33/134; Conference of Ministers resolutions 221 (XI), 241 (XI), 246 (XI), 256 (XII), 296 (XIII), 311 (XIII) and 355 (XIV) and the Lagos Plan of Action, April 1980.

(b) Objective

10.94 The objectives of this subprogramme are:

(i) Intergovernmental objectives: to create and sustain viable intergovernmental machinery for economic co-operation at the subregional, regional and interregional levels; to enhance collective self-reliance among African countries and to attempt to create an African economic community;

(ii) General objectives of the secretariat: to render the fullest support to the Multinational Programming and Operational Centres (MULPOCs) and other African intergovernmental organizations and turn them into effective instruments for structural change towards indigenous self-sustaining and self-reliant growth; to provide basic data and research on the complementarities of various national economies for the selection of economic co-operation projects, and to co-ordinate and rationalize the activities of intergovernmental organizations in this field;

(iii) Time-limited subsidiary intergovernmental objective: to bring the economic co-operation programmes of different African intergovernmental organizations into harmony both with one another and with those of the MULPOCs.

(c) Problem addressed

10.95 The approach to multinational co-operation in African countries must begin with building up knowledge of the continent's resources and capabilities before designing programmes for their common exploitation. A resource inventory in each MULPOC subregion, including the manpower capabilities of individual member States, is still lacking. Existing or proposed co-operation arrangements among African countries still fall short of ensuring the emergence of indigenous production, processing, marketing and distribution mechanisms consistent with self-reliance and that such co-operative arrangements contribute to an overall framework of subregional and regional co-operative system.

(d) Strategy for the period 1984-1989

10.96 The Lagos Plan of Action stipulates that no new multinational institutions should be created unless the need for them is clearly demonstrated. During the plan period, efforts will therefore concentrate on the existing five institutions which will have assumed their role as co-ordinator or focal point for all subregional economic co-operation activities.

10.97 ECA will continue to implement economic and technical co-operation projects at the subregional level.

10.98 The following areas will be accorded high priority during the period: exploration and evaluation of natural resources; development of African multinational corporations in the extraction, marketing and processing of raw materials; standardization of inputs, products or processes; development of a co-ordinated transport and communications infrastructure; establishment of multinational banks to mobilize and channel financial resources; development of joint insurance and reinsurance ventures.

SUBPROGRAMME 5. EDUCATION AND TRAINING FOR DEVELOPMENT

(a) Legislative authority

10.99 The legislative authority for this subprogramme is General Assembly resolutions 35/56 and 35/64 on the Lagos Plan of Action; Commission resolutions; Conference of Ministers resolutions 306 (XIII), 318 (XIII), 349 (XIV), 370 (XIV) and 389 (XV); recommendations of the Conference of Ministers of Education of African States, Lagos, February 1976; the Lagos Plan of Action of April 1980; and the recommendations of the Conference of Ministers responsible for the Human Resources Planning, Development and Utilization, Monrovia, October 1981.

(b) Objectives

10.100 The objectives of this subprogramme are:

(i) Intergovernmental objective: to develop in all sectors the manpower capability necessary for accelerated economic and social development;

(ii) General objectives of the secretariat: to assist member States in their manpower training through reappraisal and subsequent development of educational and training policies and programmes.

(c) Problem addressed

10.101 The gap between the urban and the rural sectors in terms of quality of educational and training services has widened because of the shortage and poor quality of training teachers, and the lack of relevant curricula, instructional materials and methods. An uncontrolled growth of substandard educational institutions has taken place, as well as an increased reliance on foreign sources of instructional materials, teacher and advisory and consultancy services. To support the region's commitment to self-reliance through intra-African co-operation, there is a need to develop the region's capacity to reorient its education and training systems, and to train staff to spearhead the reform.

10.102 Activities under this subprogramme will consist of the further assessment of education and training needs of member States, the development of training materials, elaboration of institutional strategies through research and technical assistance, including:

(a) Consultative missions and studies to determine the problems and formulate proposals containing guidelines for alternative actions and strategies;

(b) Preparation and dissemination of the above followed by consultations to agree on the proposed action.

SUBPROGRAMME 6. MANPOWER AND EMPLOYMENT PLANNING AND POLICIES

(a) Legislative authority

10.103 The legislative authority for this subprogramme is Conference of Ministers resolutions 306 (XIII), 319 (XIII), 348 (XIV) and 389 (XV) and the Lagos Plan of Action of April 1980.

(b) Objectives

10.104 The objectives of this subprogramme are:

(i) Intergovernmental objective: to develop sound policies for manpower and employment planning based on accurate information for the most effective use of human resources;

(ii) General objectives of the secretariat: formulation and promotion of a comprehensive strategy for the development and operation of effective human resources and employment planning system, including the training of personnel and the improvement of human resource and employment planning data base.

(c) Problem addressed

10.105 Characteristic human resources problems such as unemployment, migrant labour, brain drain; unbalanced skill mix in the educational system, with the resultant surplus of skills in some areas and deficit in others can be traced to ineffective planning of human resource development and utilization.

10.106 The region is still unable to co-ordinate its efforts for regional employment equilibrium through subregional and regional co-operation and arrangements.

10.107 Owing to the paucity of the data base and specialists in human resources and employment planning and the inadequate arrangements for sectoral manpower surveys, an unrealistic and distorted picture emerges of the region's manpower and employment situation.

(d) Strategy for the period 1984-1989

10.108 Activities under this subprogramme will consist of the preparation of more manpower profiles in basic industries; workshops and seminars on how to relate the pattern of output of educational institutions to manpower profiles and the development of effective

manpower planning machinery and techniques through technical publications, training and advisory services on the development of indigenous entrepreneurial capabilities in public and private sectors of African countries.

B. Organization

10.109 Intergovernmental review: Work of the secretariat in this programme was reviewed by the annual Conference of Ministers of the Economic Commission for Africa at its last session, held in Freetown in April 1981.

10.110 Secretariat: The secretariat unit responsible for subprogrammes 1 to 3 is the Socio-economic Research and Planning Division, in which there were 14 professional posts authorized as at 1 January 1982. The secretariat unit responsible for subprogramme 4 is the Economic Co-operation Office in which there were 13 professional posts authorized as at 1 January 1982. The five Multinational Programming and Operational Centres (MULPOCs) which are under the general supervision of the Economic Co-operation Office had a total extrabudgetary staff of 24 professional posts as at 31 January 1982. The secretariat unit responsible for subprogrammes 5 and 6 is the Manpower Development Section of the Public Administration, Management and Manpower Division, in which there were 9 professional posts authorized as at 1 January 1982.

CHAPTER 11. ENERGY

PROGRAMME 3. ENERGY AND DEVELOPMENT IN AFRICA (ECA)

A. Subprogramme

SUBPROGRAMME. INTEGRATION OF ENERGY POLICIES INTO OVERALL SOCIO-ECONOMIC DEVELOPMENT AND ECONOMIC GROWTH POLICIES

(a) Legislative authority

11.68 The legislative authority for this subprogramme is General Assembly resolutions 35/64, concerning implementation of the Lagos Plan of Action, and 35/56; the Nairobi Programme of Action, paragraphs 71-73; Conference of Ministers resolution 305 (XIII), 309 (XIII), 314 (XIII) and 318 (XIII); and the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa, (A/S-11/14, annex), chapter XI.

(b) Objectives

11.69 The objectives of this subprogramme are:

(i) Intergovernmental objectives: To increase the availability of energy resources in Africa so as to ensure indigenous and self-sustained development; and to diversify energy sources and provide better living conditions in rural and remote areas by making better use of all sources of energy, with emphasis on new and renewable sources;

(ii) Time-limited subsidiary intergovernmental objectives: To adopt the constitution of the African Energy Commission, the objectives of which are outlined in the Lagos Plan of Action; and to establish institutions which can help African countries to develop collectively the capabilities and infrastructure essential for the development of energy resources, both conventional and new and renewable, which they are too poor to set up individually;

(iii) General objectives of the Secretariat: To initiate and participate in measures to facilitate action both individually and collectively for the integration of energy policies into general socio-economic growth and development policies in Africa; and to promote and implement multinational co-operation activities related to the exploration, exploitation, development and utilization of conventional and new and renewable sources of energy, particularly in remote and rural areas.

(c) Problem addressed

11.70 Accelerated African development and the continuing international energy crisis have further highlighted the energy problem of African countries and the imperative need for the planning and optimum development of the energy resources of the region. However, there is not yet accurate knowledge of all the different sources of energy known to exist in the region; there is an acute shortage of indigenous high level skills and of the technology required for the effective exploration, evaluation and exploitation of the resources, continued importation of

which will worsen the balance-of-payments problems of the region and prolong the time required for the attainment of national and collective self-reliance. Capabilities for effective energy planning and its integration into overall socio-economic development efforts are weak in many countries of the region and non-existent in others. There is also a shortage of institutions, whether at the national or multinational level, capable of promoting the formulation and implementation of sound energy policies and initiating and managing viable energy projects. The problem of financing also exists.

11.71 One of the undesirable effects of planned development and economic growth efforts in the past has been the excessive concentration of projects in urban areas and the associated neglect of rural areas. The provision of energy, particularly from new and renewable sources, in rural and remote areas is one of the measures required for redressing the imbalance between urban and rural areas and arresting the growing depletion of those areas.

(d) Strategy for the period 1984-1989

11.72 The strategy with respect to this subprogramme is:

(i) Exploration, evaluation and development of energy resources and integration of energy policy-planning into overall socio-economic policy planning. In view of the long period that the transition from conventional to new and renewable sources of energy is bound to take, African countries have no choice but to pay attention to the development of both conventional and new and renewable sources of energy. In this connection, assistance will be provided to member States in:

a. Undertake a systematic and comprehensive inventory of their conventional and new and renewable sources of energy and creating optimum conditions for the exploration, exploitation, distribution and use of these energy resources (the regional documents summarizing fossil energy resources in Africa, which will have been drafted by the end of 1983, would be useful in this task);

b. Formulating integrated energy policies and integrating them into overall socio-economic development and economic growth policies;

c. Interconnecting electrical energy grids of neighbouring countries;

d. Ensuring small-scale production, distribution and expanded use of electrical energy in rural areas;

e. Mobilizing the necessary financial resources for the development of these energy resources.

(ii) Research, training and information. Continuous monitoring of the energy situation, the training of indigenous manpower and the collection and dissemination of information on energy are equally important for the successful solution of African energy problems. In this connection, the following activities will be undertaken:

a. Studies on the organizational and operational aspects of energy resources, such as hydropower, petroleum, coal and gas;

b. Appraisals of the possibilities of developing ocean, geothermal, biogas and wind energy in Africa;

c. Investigation of the possibilites for the local manufacturing of electrical equipment parts and components and of equipment, using new and renewable sources of energy;

d. Studies on the possibility of establishing an African institute of nuclear physics;

e. Training of African researchers, engineers and technicians in the fields of petroleum, coal, gas, solar, geothermal, biogas, wind energy etc.; efforts will be directed towards providing training awards through the expanded Training and Fellowship Programme and obtaining assistance for formal and in-plant training from other multilateral and bilateral sources;

f. Collection and dissemination of information on energy including the preparation of supply and demand projections and the periodic updating of the Energy Resources Atlas of Africa and the Electrical Map of Africa;

g. Establishment of demonstration centres for solar, wind and biomass equipment in all the subregions of Africa;

h. Organization of study tours for African experts, to countries, particularly developing countries, with experience in the utilization of new and renewable sources of energy.

(iii) Institution-building. In order to promote the effective implementation of energy policies at the national and multinational levels in Africa, there is need for the establishment of appropriate institutions. Towards this end, the following activities will be undertaken:

a. Promotion of the establishment of the African Energy Commission and of the African Energy Fund through studies, organization of meetings of plenipotentiaries and mobilization of the required financial resources;

b. Assistance to member States in the establishment of national and multinational energy committees as well as the establishment of technical committees of experts on new and renewable sources of energy in all African economic subregions; and

c. Provisional support for the effective management of these institutions.

B. Related activities found elsewhere in the medium-term plan

11.73 In addition to the work being undertaken in other programmes in the present chapter to which this programme will relate as appropriate, the following related activities are reflected in the ECA plan. The subprogramme on agriculture of the Joint ECA/FAO Agriculture Division includes work on forest resources development, exploitation and conservation, and integrated development of rural areas which is interrelated with work on biomass and hydropower development. The Joint ECA/UNIDO Industry Division implements projects related to various industries, including the development of coal and hydrocarbon resources or energy projects connected with manufacturing of solar equipment, electrical equipment or the transfer of industrial technology. Science and technology activities related to energy include projects on development and diffusion of technologies relevant to the problems and needs of the rural population; technologies suitable for rural areas, solar energy use, biogas development and construction of small-scale hydropower schemes. The International Trade and Finance Programme has many components related to energy subprogramme elements - especially development of various subregional economic groupings and co-operation between them. The Transport, Communications and Tourism Division has activities in inland waterways development and water utilization related to projects in the field of new and renewable sources of energy. PADIS, a system for collecting, utilizing and disseminating information, has a well-defined component on energy, cross-referenced with all the above-mentioned sectors. In designing specific proposals for each biennium, co-ordination with related activities found elsewhere in the plan will be clearly established.

C. Related activities being undertaken elsewhere in the United Nations system

11.74 A number of specialized agencies and organizations have relevant activities in the Africa region, including the inventories of energy resources being carried out by the International Atomic Energy Agency (uranium deposits) and the World Meteorological Organization (inventory of solar and wind resources). In terms of the development of energy resources (including planning), UNIDO has projects in the development of methane gas in eastern Africa, biomass development, fuelwood and charcoal production; UNDP is involved in the development of geothermal and solar energy, oil shales and tar sands in selected African countires; and the World Bank is also working in these areas. FAO is involved in the development of bioconversion technology, fuelwood programme and charcoal manufacturing. Training activities related to energy are organized or sponsored by the ILO, UNESCO, IAEA, WMO and FAO. Transfer of technology and exchange of information are also a major activity for organizations such as the United Nations University and UNESCO. The ILO is carrying out research on the social implications of petroleum development programmes, rural fuel requirements, and women's work and alternative energy technologies. In designing specific activities in the biennial programme budgets specific co-ordination arrangements should be made with related activities elsewhere in the United Nations system.

D. Organization

11.75 Intergovernmental review: The work of the secretariat in this programme is reviewed by the annual ECA Conference of Ministers. A draft of this plan was reviewed at the last meeting of the Conference which was held from 6 to 10 April 1981.

11.76 Secretariat: The secretariat unit responsible for this programme is the Energy Resources Unit of the Natural Resources Division of ECA, in which there were three professional posts authorized as at January 1982.

CHAPTER 17. NATURAL RESOURCES

III. REGIONAL PROGRAMMES

PROGRAMME 3. NATURAL RESOURCES IN AFRICA (ECA)

A. Subprogrammes

SUBPROGRAMME 1. MINERAL RESOURCES

(a) Legislative authority

17.67 The legislative authority for this programme is General Assembly resolutions 3201 (S-VI), paragraphs 4 (e), (f), (g) and (j) and 3202 (S-VI), paragraphs I.1, IV (e); Conference of Ministers resolutions 256 (XII), 261 (XII), 280 (XII); the Lagos Plan of Action of April 1980 (paras. 70 and 80); and the recommendations of the First Regional Conference on the Development and Utilization of Mineral Resources in Africa, held at Arusha from 2 to 6 February 1981.

(b) Objectives

17.68 The objectives of this subprogramme are:

(i) Intergovernmental objective: the optimized development and utilization of the mineral resources of the region for the furtherance of the self-reliant and self-sustaining socio-economic development of Africa, with emphasis given to the preparation of maps, inventory of mineral resources, the establishment of a sub-committee on mineral resources, the harmonization of policies and programmes of Governments and the establishment of professional associations and institutions for promoting and financing mineral development;

(ii) General objectives of the secretariat: to assist African countries and territories in improving knowledge of their mineral resources, including assistance in the preparation of maps and developing appropriate institutional structures and technical and managerial capabilities for the efficient exploitation and utilization of mineral resources at all levels;

(iii) Time-limited subsidiary objective of the secretariat: to assist Member States in establishing mineral resources development centres in the West and North African subregions; establishment of a regional body to assist Governments in appraising policy, legislation and machinery relating to minerals and mining; and organization of one or two seminars or workshops on the role of and prospects for major minerals in regional development by 1985.

(c) Problem addressed

17.69 African mineral resources are, in general, exploited by foreign-based companies and exported with very little processing. Most Governments have not been able to take the necessary measures to develop and integrate fully mineral resources activities into their economic development policies. Knowledge of the

resources base is still inadequate in a majority of the member States. Many national geological and mining services do not yet have the technical and financial capability for establishing the infrastructure needed for the development of the mineral resources for the benefit of the country.

(d) Strategy for the period 1984-1989

17.70 Emphasis will be placed on providing assistance to Governments in building up the technical knowledge of their mineral resources base and in developing the capabilities for extracting, processing and utilizing their minerals efficiently.

17.71 The studies on available resources of iron ore, copper, bauxite, phosphate rock and potash will be used for projects of development of small-scale mining and metal industries as well as for increased production and local use of fertilizers in African countries. The assessment of available resources at the national level through invetories of mineral deposits will be continued for base metals, ferro alloys and industrial minerals and, by 1986-1987, the publication of the first African inventory of mineral resources at regional level is expected. The network of multinational mineral resources development centres will be completed with the establishment of the West African Centre. Inter-African workshops, seminars, study tours and reviews of the major activities for sharing experience and transfer of technology will be organized at the subregional level by the multinational centres for mineral resources development in direct relation with their programme on preparation of subregional studies, thematic maps and inventories of mineral resources. A similar programme will be undertaken at the regional level by the secretariat. The possibility of establishing an African Council of Mineral Resources Development attached to the regional conference of ministers of mineral resources will be studied.

SUBPROGRAMME 2. WATER RESOURCES

(a) Legislative authority

17.72 The legislative authority for this subprogramme is General Assembly resolution 32/158, and Conference of Ministers resolutions 308 (XIII) and 339 (XIV).

(b) Objectives

17.73 The objectives for this subprogramme are:

(i) Intergovernmental objective: to promote the development, management and conservation of the region's water resources through assessment of the availability of surface and ground-water resources; preparation of hydrological maps of Africa; creation and strengthening of joint river/lake basin commissions; establishment of subregional multinational water

resources institutes; development of water resources in drought affected areas; and establishment of a regional institutional mechanism; to promote follow-up action at the regional level in the implementation of the recommendations of the Mar del Plata Action Plan of the United Nations Water Conference;

(ii) General objectives of the secretariat: to assist countries and territories of the region in acquiring a knowledge base of surface and ground-water resources and in developing institutional capabilities for the appropriate exploitation and development of their water resources.

(c) Problem addressed

17.74 Many countries in Africa lack knowledge of their water resources endowment. Hydrological and meteorological networks are insufficient. The number of trained manpower in the region has not increased sufficiently; many countries still depend on overseas services for research and the preparation of feasibility studies and project documents. Many countries of the region face substantial problems relating to various aspects of water development, including difficulties in procuring financial resources in time to carry out water development projects.

(d) Strategy for the period 1984-1989

17.75 The programme will focus on access to safe water supplies and on drought-affected areas. The programme will emphasize approaches that lead to effective planning, policy-making and legislation. Emphasis will be given to the establishment of joint river/lake basins organizations to promote intergovernmental co-operation in the development of shared water resources. Further, assistance and advisory services will be provided to member States in close co-operation with UNESCO, WHO, FAO and other relevant organizations of the United Nations system in various water resources development aspects such as: (a) assessment of surface and ground-water availability, their use and demand, in terms of quantity and quality, to the establishment of observational networks as well as laboratories for comprehensive water analyses and the establishment of data processing and storage centres as well as the development of an integrated national data system; (b) preparation of long- and medium-term plans to provide guidance in drawing up specific water supply, waste water supply and waste water disposal projects; special emphasis will be given to community water supply and sanitation projects which are closely integrated with rural development projects, with a view to achieving the targets of the International Drinking Water Supply and Sanitation Decade; (c) formulation of programmes for the development of water resources in drought-affected areas in Africa for flood control and hydrological forecasting; (d) assistance will be given to selected countries in the formulation of programmes and the identification of projects for irrigation, drainage and land reclamation; (e) promotion of subregional and regional co-operation in water resources development and economic utilization through the strengthening of existing joint river/lake basin commissions and/or the creation of new ones; (f) manpower surveys at the subregional and regional levels for the purpose of the establishment of multinational institutes for water resources development, training, management, research and other specialized services.

SUBPROGRAMME 3. CARTOGRAPHY AND REMOTE SENSING

(a) Legislative authority

17.76 The legislative authority for this subprogramme is the Conference of Ministers resolutions 288 (XII) and 313 (XIII) and resolutions of the first to fifth United Nations Regional Cartographic Conferences for Africa: resolutions 5, 10 and 18 of the first Conference; resolutions 3,6 and 8 of the second Conference; resolutions 2, 6, 7 and 8 of the third Conference; resolutions 4, 5, 6 and 9 B of the fourth Conference.

(b) Objectives

17.77 The objectives of this subprogramme are to give assistance and advice to member countries for the strengthening of their national cartographic institutions and acquisition of geodetic data, revise and publish new editions of the inventory, provide technical support for the African Remote Sensing Programme and expand the technical capacity of the Map Documentation and Reference Centre.

(c) Problem addressed

17.78 Many projects relating to cartography are being carried out in Africa by foreign organizations and companies. However, the records of these activities are often incomplete or dispersed in unpublished or unindexed reports. Moreover, several of these surveys lack a unified framework and do not follow common specifications. In addition, the absence of institutions in Africa to manage African satellite receiving stations has prevented Africa from obtaining basic up-to-date data on remote sensing. The above shortcomings have affected the usefulness of existing materials, hindered the planning of national and regional development schemes, led to unnecessary repetitions of expensive surveys and reduced the benefits from modern cartographic and remote sensing techniques. Furthermore, an estimation of the manpower required and the nature of the institutions needed to provide it continue to be conjectural. Training at centres outside the continent is not geared to managerial or production activities within an African context.

(d) Strategy for the period 1984-1989

17.79 Multinational programmes of geodetic, geophysical and topical mapping will be launched to fill in the gaps disclosed by the cartographic inventory. Efforts will be made to continue the co-ordination of procedures at the remote sensing stations and the training centres. Support will be given to the convening (in 1985) of a seminar on remote sensing dealing with advanced topics. The sixth United Nations Regional Cartographic Conference for Africa will also be convened (in 1987). The Map Documentation and Reference Centre will be enlarged in scope and capacity.

Subprogramme 4 of programme 3 is to be reformulated and resubmitted to the Committee for Programme and Co-ordination at its twenty-third session. As a consequence, it has been deleted from the present document. After approval the revised subprogrammes will be issued in an addendum to the present document.

B. Organization

17.84 Intergovernmental review: The work of the secretariat in this programme is reviewed by the annual ECA Conference of Ministers, the last meeting of which was held in Addis Ababa in April 1981. A draft of this plan was reviewed by this body.

17.85 Secretariat: The secretariat unit responsible for this programme is the Natural Resources Division, in which there are 13 professional posts authorized as at January 1982, 3 of which were supported from extrabudgetary sources.

CHAPTER 20. SCIENCE AND TECHNOLOGY

III. REGIONAL PROGRAMMES

PROGRAMME 3. SCIENCE AND TECHNOLOGY IN AFRICA (ECA)

A. Subprogrammes

SUBPROGRAMME 1. DEVELOPMENT OF POLICIES, MACHINERY AND CAPABILITIES FOR SCIENCE AND TECHNOLOGY

(a) Legislative authority

20.69 The legislative authority for this subprogramme is Commission resolution 206 (IX) and Conference of Ministers resolution 248 (XI); Economic and Social Council resolutions 1083 (XXXIX), 1900 (LVII); General Assembly resolutions 3362 (S-VII); 3507 (XXX); 34/218, section I; and 35/56 on the Lagos Plan of Action, paragraphs 123, 124 and 145 to 155; UNCTAD resolution 87 (IV); Conference of Ministers resolution 332 (XIV), sections I, and II, paragraph 7; OAU resolution CM/Res 722 (XXXIII)/Rev.1, paragraph 5; Conference of Ministers resolution 386 (XV), paragraph 4.

(b) Objectives

20.70 The objectives of this subprogramme are:

(i) Intergovernmental objective: to adopt measures to ensure the development of an adequate science and technology base and the appropriate application of science and technology in spearheading development in the different sectors of the economy;

(ii) General objective of the secretariat: organization and promotion of a strategy to encourage the recognition of the role of science and technology in African development and to strengthen the capabilities of member States to apply science and technology to development;

(iii) Time-limited subsidiary objectives of the secretariat: development and dissemination of models of rural technologies which have proved to be suitable for application in rural Africa, by the process of adaptation and demonstration, to be completed by 1990; publication of an updated handbook of non-proprietory technology for building and construction materials in 1985 and of a new and similar handbook of technology for food processing and storage in the last quarter of 1986.

(c) Problem addressed

20.71 In many African countries the impact of science and technology on economic development is not yet fully appreciated, as is shown by the fact that the science and technology components are not fully integrated in national development plans. Because of this situation, a number of countries have yet to establish relevant institutions and other machinery and/or meaningfully strengthen those that exist for the development of scientific and technological capabilities.

(d) Strategy for the period 1984-1989

20.72 Technical assistance (within the mandate of the Lagos Plan of Action) will be provided to member States in the form of:

(i) Advisory services (technical publications, reports, visits, etc.), in the establishment and strengthening of national and subregional centres for technology and research and development institutions and in the formulation of science and technology policies and plans;

(ii) Technical services to the African regional intergovernmental institutions in the field of science and technology;

(iii) Advisory services (technical publications, reports, etc.) in the development and diffusion of technologies relevant to the problems and needs of the rural population. In particular, the handbook of non-proprietory technology for building and construction materials will be updated in 1984 and 1985 and work will begin in 1985 on the preparation of a similar handbook of technology for food processing and storage to be published in the last quarter of 1986;

(iv) Promotion of mobilization of resources, including financial resources.

SUBPROGRAMME 2. DEVELOPMENT OF MANPOWER FOR SCIENCE AND TECHNOLOGY

(a) Legislative authority

20.73 The legislative authority of this subprogramme derives from Economic and Social Council resolutions 1083 (XXXIX) and 1155 (XLI); General Assembly resolutions 2318 (XXII), 34/218, section I, and 35/56 on the Lagos Plan of Action, paragraphs 129 to 144; Commission resolution 158 (VIII); Conference of Ministers resolutions 238 (XI) and 332 (XIV), sections I, and II, paragraph 7; Conference of Ministers resolution 386 (XV), paragraph 4.

(b) Objective

20.74 The objectives of this subprogramme are:

(i) Intergovernmental objective: to develop, as a top priority, human resources for the creation of a science and technology infrastructure of manpower, knowledge, skills, and innovative and productive capacities to enable peoples in the region to assume greater responsibility for the achievement of their individual and collective goals; to collaborate with the international community in tackling the root causes of the "brain drain" problem in order to reverse the trend;

(ii) General objective of the secretariat: to design and conduct surveys and distribute model training programmes; to conduct training workshops with particular emphasis on technology for the rural areas; and to assist in the establishment and/or strengthening of institutions for the development of manpower for science and technology;

(iii) Time-limited subsidiary objectives of the secretariat: development and distribution of models of training and production workshops for the building materials and construction industries by 1985.

(c) The problem addressed

20.75 The majority of African countries are faced with an acute shortage of scientific and technical manpower, and this constitutes a major obstacle to the Government's endeavours to achieve their development objectives. The problem is both qualitative and quantitative and calls for: improvements in education and training programmes relating them to the national natural resources base; provision of expanded facilities to produce the requisite range and numbers of skilled personnel; reorientation of existing training institutions, making them scientifically, technologically and culturally of greater relevance to the African region, and stopping the outflow of indigenous skilled manpower from the region.

(d) Strategy for the period 1984-1989

20.76 Technical assistance (within the mandate of the Lagos Plan of Action) will be provided to member States in the form of:

(a) Advisory services (technical publications, reports, visits, etc.), in: (i) restructuring existing curricula in technology at universities and institutes of technology and assisting in the development of mechanisms for the local production of educational material at their request, (ii) promoting co-operation between universities, research and development institutions and industry in the field of manpower development;

(b) Conducting training programmes for nationals of member States to enable them to learn skills and develop capability for acquiring imported technology on favourable terms;

(c) Organizing the mobilization of the adaptive technology potential in the informal sector.

20.77 In addition, a training workshop on aspects of technology policy and planning will also be held each year throughout the planning period with whatever co-sponsors may be necessary.

SUBPROGRAMME 3. PROMOTION OF REGIONAL AND INTERREGIONAL CO-OPERATION

(a) Legislative authority

20.78 The legislative authority for this programme derives from Economic and Social Council resolution 1155 (XLI); Commission resolution 158 (VIII); Conference of Ministers resolutions 238 (XI) and 332 (XIV), sections I, and II, paragraph 7; General Assembly resolution 34/218, section I; 35/56 on the Lagos Plan of Action, paragraphs 184 to 198, 200, 202 and 203.

(b) Objectives

20.79 The objectives of this subprogramme are:

(i) Intergovernmental objective: to co-operate in the identification and implementation of elements of the Lagos Plan of Action concerned with the Programme of Action for Science and Technology Development in Africa as a further means of strengthening the scientific and technological capabilities of African countries and to provide machinery for bilateral, and/or multinational co-operation among African or third world countries, in a conscious effort to promote collective self-reliance; to continue to seek increased funding from international and regional funding agencies for multinational development projects;

(ii) General objective of the secretariat: to create an atmosphere of effective co-operation in the field of science and technology among member States and between member States and non-African countries, especially those of the third world;

(iii) Time-limited objectives of the secretariat: as a result of efforts through a UNDP/TCDC project, intergovernmental arrangements for technical and economic co-operation in science and technology between Africa and Asia should be under way in the last quarter of 1984; the Directory of National Science and Technology Institutions and their capabilities will be updated during 1985 and republished in the second quarter of 1986.

(c) The problem addressed

20.80 Because of the scarcity of available resources and the size of population, many African countries are not able to implement significant research and development projects or to train scientific and technological manpower to meet their needs in various sectors of their national economies. It is, therefore, necessary to collaborate with other African and third world countries in tackling these problems, particularly through the creation of multinational institutions, the organization of study trips by Africans and other desirable arrangements, as appropriate, to enable the participants to learn from the experience of their counterparts in overcoming similar problems.

(d) Strategy for the period 1984-1989

20.81 Arrangements will be made to review co-operation between ECA and UNESCO in the field of science and technology at the ECA/UNESCO joint concertation meetings in the last quarter of every year.

20.82 Technical assistance (within the mandate of the Lagos Plan of Action) will be provided to member States in the form of: (a) consultations leading to the establishment of machinery for co-operation between the United Nations Centre for Science and Technology for Development and the ECA Science and Technology Unit in efforts to set up a system for the early identification and assessment of new scientific and technological developments in the region and a global information system for science and technology, and to develop indicators of scientific and

technological development in the region; (b) advisory services (technical publications, reports, visits, etc.) to subregional and multinational groupings (e.g., by the provision of science and technology field advisers to the ECA's multinational programming and operational centres (MULPOCs), to establish new regional and multinational institutions in science and technology where justified and strengthen existing African regional institutions in the field of science and technology for development, to promote intraregional and interregional TCDC activities in science and technology.

20.83 A regional review of the implementation of the Lagos Plan of Action within the framework of the Operational Plan will be made in 1984 and a contribution will be made to the global mid-decade review of the Operational Plan in 1985, with the assistance of the Centre for Science and Technology for Development.

B. Organization

20.84 Intergovernmental review: the work of the secretariat in this programme is reviewed, first, by the Regional Intergovernmental Committee of Experts on Science and Technology for Development and, secondly, by the Technical Preparatory Committee of the Whole, both of which are subsidiary bodies of the ECA Conference of Ministers. A preliminary draft of this plan was reviewed by the Technical Preparatory Committee of the Whole at its meeting in Freetown, Sierra Leone (24 March to 2 April 1981).

20.85 Secretariat: the secretariat unit responsible for this programme is the Science and Technology Unit, in which there were four Professional posts authorized as at 1 January 1982, financed by the regular budget and one from extrabudgetary sources.

CHAPTER 22. STATISTICS

III. REGIONAL PROGRAMMES

PROGRAMME 3. STATISTICS IN AFRICA (ECA)

A. Subprogrammes

SUBPROGRAMME 1. STATISTICAL DEVELOPMENT

(a) Legislative authority

22.62 The legislative authority for this subprogramme is Economic and Social Council resolutions 2054 (LXII), 2061 (LXII), 2124 (LXIII), paragraph 4, 1979/5, paragraph 5, 1979/33, paragraph 2 and 1979/49, paragraph 3; Commission resolutions 230 (XIV), 359 (XIV), 368 (XIV), 377 (XV) and 401 (XV); and the report of the first session of the Joint Conference of African Planners, Statisticians and Demographers (E/CN.14/740).

(b) Objectives

22.63 The objectives of this subprogramme are: to develop improved statistics in the region; to train statistical personnel for African national statistical services in the public and private sectors; and to develop a regional framework of statistical information for analytical purposes.

(c) Problem addressed

22.64 There are considerable differences between countries in the development of their statistical infrastructures. Many still lack reliable, up-to-date or detailed statistics. For example, as at December 1979, no national accounts aggregates were available for 6 countries and external trade statistics were not available for 21 countries of the region. As regards industrial statistics, only 8 countries have information on employment and wages, electricity consumption, value added and gross capital formation. Sparse resources are frequently allocated to statistical development. Many qualified local staff leave these services after gaining a few years of practical experience or join other sectors directly after training. There is a pressing need for statistical information for public purposes and to evaluate and monitor developments in the African region in relation to the International Development Strategy.

(d) Strategy for the period 1984-1989

22.65 The subprogramme will concentrate mainly on technical assistance programmes designed to develop statistical information for public purposes and to provide guidance to national statistical personnel in the gathering and management of such data, including the development of computerized statistical data bases. The quantity and quality of statistical personnel will be improved through training efforts under the Statistical Training Programme for Africa. A continuing review of the statistical organization in the region is planned, as well as the continued maintenance of an inventory of the electronic data processing facilities and applications.

SUBPROGRAMME 2. ECONOMIC STATISTICS

(a) Legislative authority

22.66 The legislative authority for this subprogramme is Economic and Social Council resolution 2061 (LXII), Conference of African Ministers of Industry resolution 3 (IV) of November 1977, paragraph 4 and the report of the first session of the Joint Conference of African Planners, Statisticians and Demographers (E/CN.14/740).

(b) Objectives

22.67 The objective of this subprogramme is: to provide more comprehensive, reliable and timely statistics on international trade, national accounts and other economic statistics, including agriculture, industry, transport, energy, natural resources, prices and public finance, with special emphasis on least developed and newly independent countries.

(c) Problem addressed

22.68 Statistical information plays at present an inadequate role in policy-making, planning, economic and social development, administration and business. Thus there is a need for timely data of a range and quality sufficient for these purposes. The problem has become much more urgent because of the statistical implications of the Lagos Plan of Action. Governments require a broad range of detailed statistics to furnish them with an overall view of the economic situation.

(d) Strategy for the period 1984-1989

22.69 Seminars are planned on economic accounts for agriculture in collaboration with FAO; on tourism statistics (1984), on the collection of agricultural and industrial price data and related problems (1985) and on external trade statistics (1987). Working groups are planned on distributive trade statistics and the measurement of the unmarketed output of industries (1984), port statistics and national accounts at constant prices (1986), energy statistics (1987), input-output tables and road transport statistics (1988) and the improvement of data on small-scale and household industries (1989).

22.70 Studies are planned for food production and imports (1984), rural price data collection (1984), guidelines for a system of price and quantity statistics and their implementation in the field of transport (1985), production, domestic use and trade in industrial raw materials (1985), transport and communication statistics in the African region (1986), production, consumption and exchange of energy (1987), the implementation of the United Nations System of National Accounts in African countries (1989). In addition, the continued production of the following publications is planned: The African Statistical Yearbook, Foreign Trade Statistics for Africa, African Economic Indicators and the periodic Statistical Information Bulletin for Africa.

SUBPROGRAMME 3. CENSUSES AND SURVEYS

(a) Legislative authority

22.71 The legislative authority for this subprogramme is Economic and Social Council resolutions 2055 (LXII), paragraph 5, 2061 (LXII), paragraph 2, 1979/5, paragraph 6, and 1979/33, paragraphs 2 and 4; Commission resolutions 366 (XIV) and 400 (XV); and the report of the first session of the Joint Conference of African Planners, Statisticians and Demographers (E/CN.14/740).

(b) Objectives

22.72 The objectives of this subprogramme are: to establish permanent census and survey capability in all countries of the region; to assist African Governments with the collection and analysis of integrated demographic, economic and social data on the household sector; to develop further other aspects of demographic and social statistics, including civil registration.

(c) Problem addressed

22.73 Remarkable progress has been made in the last few years in collecting and analysing demographic data in Africa, but there is still a need to improve the quality and quantity of such data particularly as regards the three factors which affect population trends, namely, fertility, mortality and migration. There is also a need to improve civil registration systems.

(d) Strategy for the period 1984-1989

22.74 The subprogramme will continue to concentrate on the improvement of national statistical capabilities in demographic and social statistics. Work will continue under the African Household Survey Capability Programme and the Regional Advisory Service in Demographic Statistics. Advisory services will be provided in the planning and conduct of national population and housing censuses and of integrated household survey programmes and in the development and improvement of civil registration systems and the gathering of vital statistics.

22.75 Studies will be undertaken on the methods and problems of civil registration systems and vital statistics collection in Africa (1984), the development of social indicators in the region (1984), a framework for the integration of demographic, social and related economic statistics for Africa (1985), evaluation of the 1980 census data (1985), methods and problems of African population and housing censuses (1986), the processing of census, civil registration and sample survey data, (1987), concepts, definitions and classifications used in censuses, and demographic and social surveys in Africa (1987), population registers in Africa (1985), further socio-economic indicators derived from household survey data (1989), and non-sampling errors (1989). A methodology will be developed for the continuing collection, processing and analysis of integrated economic, social and demographic statistics from households. Working groups will be organized to make recommendations on population and housing censuses (1986), environment statistics (1987) and the

organization, content and methodology of household surveys (1985, 1987, 1989). A second training workshop on the use of statistical software packages (1985) and a workshop on census taking for English-speaking countries (1987) will also be held.

B. Organization

22.76 Intergovernmental review: the work of the secretariat in this programme is reviewed by the Joint Conference of African Planners, Statisticians and Demographers which meets every two years. The last meeting was in March 1980. This plan has not been reviewed by this body which is not scheduled to meet until 1983.

22.77 Secretariat: The secretariat unit responsible for this programme is the Statistics Division, in which there were 12 professional posts authorized as at 1 January 1982.

CHAPTER 24. TRANSPORT, COMMUNICATIONS AND TOURISM

III. REGIONAL PROGRAMMES

PROGRAMME 3. TRANSPORT, COMMUNICATIONS AND TOURISM IN AFRICA (ECA)

A. Subprogrammes

SUBPROGRAMME 1. GENERAL AND MULTIMODAL TRANSPORT

(a) Legislative authority

24.41 The legislative authority for this subprogramme is General Assembly resolution 32/160; Economic and Social Council resolution 2097 (LXIII); Conference of Ministers resolutions 263 (XII), 277 (XII), 291 (XIII), 341 (XIV), 342 (XIV) and 398 (XV).

(b) Objectives

24.42 The objectives of this subprogramme are:

(i) Intergovernmental objective: development of an integrated transport network at the national and international levels.

(ii) Time-limited subsidiary intergovernmental objective: to establish a regional multimodal transport institute by 1986.

(iii) General objective of the secretariat: to assist African countries in the preparation of national and multinational transport policies and programmes for the development of integrated transport system and infrastructure at the national and multinational levels and for the co-ordination of investments and operation of the transport system.

(c) Problem addressed

24.43 Transport constitutes a most important sector whose development promotes growth in other sectors, the economic integration of Africa and the development of intra-African trade and trade with the rest of the world. Many countries of the region, however, do not have rational transport development policies based on the overall needs of their economic development.

(d) Strategy for the period 1984-1989

24.44 It is expected that the regional multimodal transport institute will be established by 1986.

24.45 Research: Studies on integrated transport systems at the national and multinational levels with specific emphasis on the transit transport problems of individual land-locked countries of the region will be carried out through the

plan period. Studies on the simplification of documentary procedures and on the removal of other non-physical barriers to international transport of persons and goods will be carried out by 1985.

24.46 Technical assistance will continue to be provided to African countries and organizations in policy making, planning and implementation of projects on various general and multimodal transport problems, including specific problems of the least developed, land-locked, island and newly independent countries.

24.47 Manpower development: Training needs in the field of general and multimodal transport planning, organization and management will be identified by 1985, and possibilities of the establishment of training institutions and/or programmes will be studied by 1987. Seminars and training courses in transport statistics will continue to be organized to assist the countries in the establishment of a comprehensive system of transport statistics.

24.48 Transport and Communications Decade in Africa: Various activities, such as organizing seminars jointly with UNCTAD and the Organization of African Unity (OAU), undertaking field missions to provide assistance in establishment of multimodal transport operations and participation in meetings organized by UNCTAD on the subject will be undertaken to promote the implementation of United Nations Convention on Multimodal Transport. Co-operation with ECE will be continued in finalizing an international convention on harmonization of controls at frontiers. Co-operation with ECE will also be continued in identifying the problems connected with linking of the European road network to that of the ECA region with a view to submitting proposals and recommendations to the regional commissions and Governments concerned for possible action.

SUBPROGRAMME 2. MARITIME TRANSPORT, INLAND WATER TRANSPORT AND PORTS

(a) Legislative authority

24.49 The legislative authority for this subprogramme is General Assembly resolution 32/160; Economic and Social Council resolution 2097 (LXIII), Conference of Ministers resolutions 263 (XII), 281 (XIII) 291 (XIII) and 293 (XIII).

(b) Objectives

24.50 The objectives of this subprogramme are:

(i) Intergovernmental objective: development of maritime transport (deep sea and coastal shipping), maritime ports, inland waterways and inland water transport.

(ii) Time-limited subsidiary intergovernmental objectives: (a) to increase the share of national and multinational African merchant fleets to 2 per cent of the dead-weight tonnage of the world merchant fleet by 1990; (b) to create a multinational coastal shipping line for the eastern and southern African subregion by 1990.

(iii) General objective of the secretariat: to assist Governments in preparing national and multinational policies and programmes in the field of maritime transport, ports and inland water transport.

(c) Problem addressed

24.51 While the maritime traffic generated by African economies in 1977 represented roughly 11 per cent and 3 per cent of the world tonnage loaded and unloaded, in 1979 African fleets were only roughly 1 per cent of the world tonnage in dead weight. The African coastline contains more than 80 seaports, of which some 49 are major international ports. In spite of sizeable investments, most of the ports suffer from serious deficiencies in their operations. The major African rivers and lakes offer a great potential for transport, but they require various hydrological works to improve their condition of navigability and/or extend the period of navigation, which poses serious problems as the hydrological investments are very costly. Serious obstacles to development of maritime transport, ports and inland water transport are encountered such as lack of qualified personnel, inadequate training facilities, lack of modern inland water and maritime fleet, lack of managerial capabilities in shipping, ports and inland water transport.

(d) Strategy for the period 1984-1989

24.52 Research: Studies on different aspects of African maritime transport, ports and inland water transport will continue to be prepared.

24.53 Technical assistance will be provided in the establishment and first phase of operation of multinational coastal shipping line, in utilization of the new system of port statistics for improvement of management and operation of maritime ports, in operation of inland water transport and in training of inland water transport personnel. Advisory services will continue to be provided to African countries in policy making, planning, management and implementation of investment projects in the field of maritime transport, ports and inland water transport.

24.54 Manpower development: Assistance will be provided for the establishment and/or strengthening of training centres and research institutions in the field of maritime transport, inland water transport and ports. Seminars and training courses on port management and operations, on inland water transport planning, operations and navigation and on vessel mechanics will continue to be organized.

SUBPROGRAMME 3. LAND TRANSPORT

(a) Legislative authority

24.55 The legislative authority for this subprogramme is General Assembly resolution 32/160; Economic and Social Council resolution 2097 (LXIII); Conference of Ministers resolutions 275 (XII), 276 (XII), 291 (XIII), 298 (XIII) and 342 (XIV).

(b) Objectives

24.56 The objectives of this subprogramme are:

(i) Intergovernmental objective: development of international roads and railways with a view to improving intercountry links with special attention to the case of land-locked African countries.

(ii) General objective of the secretariat: to assist Governments in (a) policy making, planning and preparation of programmes and projects for the development of roads, road transport and railways, and (b) in operating efficiently their road and railway transport systems.

(iii) Time-limited objectives of the secretariat: (a) To assist Governments in the establishment of the Cairo-Gaborone Trans-East African Highway Authority by 1984; (b) to assist in the establishment of the Tripoli-Windhoek Trans-Central African Highway Authority by 1987; and (c) to publish an African Highway Code by 1987.

(c) Problem addressed

24.57 The African road infrastructure is inadequate and the maintenance of existing networks is very poor. This is due in part to the lack of skilled manpower. Most national rail networks in Africa were built 80 to 100 years ago and there was no intention of linking them. To date they remain mostly unconnected and their technical characteristics (track gauge, rolling-stock structure and braking and traction systems) vary. In some railways the rolling-stock is worn out.

(d) Strategy for the period 1984-1989

24.58 Technical assistance in different aspects of land transport will continue to be provided to interested member countries. Studies on planning, management and operation of land transport, on development of roads and railway lines, and studies on training needs will continue to be undertaken. Training will be offered in the planning, engineering and maintenance of roads and railways.

24.59 Circulation of the first draft of the African Highway Code to interested Highway Authorities/Committees, member countries and international organizations will be undertaken to finalize the Code in 1987. Assistance to Highway Authorities/Committees will continue to be provided. The capacity of a competent department of the Economic Community of West African States to act as a Highway Authority of the Trans-West African Highway will be strengthened.

SUBPROGRAMME 4. AIR TRANSPORT

(a) Legislative authority

24.60 The legislative authority for this subprogramme is General Assembly resolution 32/160; Economic and Social Council resolution 209 (LXIII); Conference of Ministers resolutions 263 (XII), 277 (XII) and 291 (XIII).

(b) Objectives

24.61 The objectives of this subprogramme are:

(i) Intergovernmental objective: restructuring, development and more effective operation of the African air transport network to ensure maximum utilization of existing infrastructure and equipment.

(ii) General objective of the secretariat: to assist member Governments in preparing national and multinational development policies and programmes in air transport.

(c) Problem addressed

24.62 There is a lack of cohesion of African air transport network, the main links are predominantly south-north while the intra-African connections are insufficient or inadequate, and in many countries airport infrastructure is inadequate for present and future needs. This is aggravated by the lack of co-operation among the airlines.

(d) Strategy for the period 1984-1989

24.63 Technical assistance in different areas of air transport will continue to be provided to interested countries. Studies on the modernization of airport infrastructure and on the co-ordination of activities, and pooling arrangements will continue as a first step towards the creation of multinational airlines. Training needs in air transport and possibilities for the establishment of training centres and programmes in the region will be identified by 1985.

SUBPROGRAMME 5. TOURISM

(a) Legislative authority

24.64 The legislative authority for this subprogramme is Economic Commission for Africa resolution 204 (IX); Regional Conference on Tourism and Economic Development resolution of October 1978.

(b) Objectives

24.65 The objectives of this subprogramme are:

(i) Intergovernmental objective: development of tourism infrastructure and services while preserving the social, cultural and ecological environment.

(ii) General objective of the secretariat: to assist Governments in preparing national and multinational policies and programmes for the development of tourism.

(c) Problem addressed

24.66 Inadequate air transport and surface transport (railways and roads) are not conducive to the development of tourism in many African countries. This is aggravated by inadequate tourism infrastructure and services in some countries and by a lack of qualified personnel and training institutions in the region.

(d) Strategy for the period 1984-1989

24.67 Studies on the development possibilities and on the marketing of tourism will continue. Advisory services in tourism policy-making and planning will continue to be provided. Training needs in tourism will be identified by 1985 and a feasibility study on establishment of regional training centres and programmes will be conducted by 1987.

SUBPROGRAMME 6. COMMUNICATIONS

(a) Legislative authority

24.68 The legislative authority for this subprogramme is Conference of Ministers resolutions 278 (XII), 279 (XII), 281 (XII), 291 (XIII) and 319 (XIII); OAU resolution CM/RES 885 (XXXVII).

(b) Objectives

24.69 The objectives of this subprogramme are:

(i) Intergovernmental objective: development of national, subregional and regional communications networks and services.

(ii) General objective of the secretariat: to assist member States in accelerating the development of communications services in their countries at a rate commensurate with their economic and social conditions, and to assume gradually, on a co-operative basis, the planning of communications services and equipment manufacturing.

(c) Problem addressed

24.70 National networks are small and concentrated. The intraregional network, in spite of the progress made with the Pan-African Telecommunications Network (PANAFTEL), is still limited in scope. However, with the growing economic, social and political activities communications needs of the region are increasing rapidly. The lack of adequate facilities and services therefore constitutes a constraint to effective and orderly development, while the countries of the region experience difficulties in planning and building integrated communications infrastructures.

(d) Strategy for the period 1984-1989

24.71 Transport and Communications Decade in Africa: The implementation of the essential components of the Pan-African Telecommunications Network (PANAFTEL) will be completed by the end of the plan period. Technical assistance to member countries will continue to be provided in the implementation of the programme for the second phase of the United Nations Transport and Communications Decade. Promotional activities will be conducted to secure financing for the implementation of the second phase of the programme for the Decade.

24.72 Regional satellite communications system: The secretariat, in co-operation with the International Telecommunication Union, the United Nations Educational, Scientific and Cultural Organization and the Organization of African Unity, will assist the Conference of Ministers of Transport, Communications and Planning in deciding on the design (which will form part of the recommendations of the report deliberated upon by the intergovernmental experts meeting) as well as on the modalities and programme for the implementation of the system.

24.73 Postal services: Rural postal projects recommended by the report and approved by the Conference of Ministers of Transport, Communications and Planning will be implemented. And an Agreement on postal tariffs and postal regulations will, it is expected, result from the follow-up Conference of Ministers of Transport, Communications and Planning. Manpower development: Possibilities for the establishment of training institutions at basic, medium and advanced levels will be studied in 1985.

B. Organization

24.74 Intergovernmental review: The work of the secretariat in this programme is reviewed by the ECA Conference of Ministers which meets every year. The Conference of Ministers reviewed the draft medium-term plan at its seventh meeting, held from 6 to 10 April 1981.

24.75 Secretariat: The secretariat unit responsible for this programme is the Transport, Communications and Tourism Division in which there were 13 professional posts authorized as at 1 January 1982.

CHAPTER 25. MARINE AFFAIRS

PROGRAMME 3. MARINE AFFAIRS IN AFRICA

A. Subprogramme

SUBPROGRAMME 1. RESOURCES OF THE SEA

(a) Legislative authority

25.55 The legislative authority for this subprogramme is General Assembly resolution 37/66, paragraph 7 and ECA Conference of Ministers resolutions 332 (XIV) and 340 (XIV).

(b) Objectives

25.56 The objectives of this subprogramme are:

(i) Intergovernmental objective: to optimize development of capabilities for exploration, exploitation, development and management of the living and non-living resources of the sea in furtherance of the self-reliant and self-sustaining socio-economic development of African countries, and acquisition of sovereignty and jurisdiction over their territorial seas, exclusive economic zone and continental shelf as well as creation of awareness of the opportunities in the application of the United Nations Convention on the Law of the Sea;

(ii) General objective of the secretariat: to assist Member States to identify the opportunities and possibilities in the applications of the provisions of the United Nations Convention on the Law of the Sea as well as in the development of their capabilities for the exploration, exploitation, development, utilization and management of the marine resources, including those of coastal areas, for their social and economic development, through provision of information on existing national, subregional, regional and global programmes of technical co-operation on marine scientific research, training and surveillance of maritime areas;

(iii) Time-limited objective of the secretariat: to establish a regional network of training and research institutions concerned with marine science and technology and to complete preliminary studies on the establishment of new national and multinational institutions.

(c) Problem addressed

25.57 The oceans and seas surrounding the continent of Africa are rich in living and non-living resources such as fish, petroleum and metallic and industrial minerals. However, most African countries have neither capabilities, either in manpower or institutions, for exploration, exploitation and management of these resources nor adequate national or multinational policies for their development and management. As a result, not many member Governments are taking steps to identify opportunities in the application of the provisions of the Convention on the Law of the Sea.

(d) Strategy for the period 1984-1989

25.58 By the end of 1983 some preliminary work on the survey of national legislation and capabilities for exploration, exploitation, development and utilization of marine resources will have been started. Preparatory assistance will have been given to Member States and multinational institutions on the management of the resources and on the establishment of machinery for co-ordinating programmes or activities.

25.59 In the period 1984-1989, the preliminary activities will be intensified with a view to laying firm foundation for co-operative arrangements for harmonizing policies, programmes and legislation, through intergovernmental meetings and African regional meetings related to the activities of the Preparatory Commission or the International Sea-Bed Authority when that comes into existence. In co-operation with the science and technology programme, assistance will be given to Member States and intergovernmental institutions in supporting their training and research programmes.

25.60 In particular, it is planned to organize training seminars, workshops, study tours and field missions as means of strengthening national, multinational and regional institutions in the development of capabilities for the exploration, exploitation, development and utilization of the resources of the sea. Assistance will also be given in the building of inventories of the resources and in the provision of information regarding the existing national, subregional, regional and global programmes of technical co-operation in matters relating to marine scientific research and surveillance of marine areas.

25.61 Efforts will be made to establish a regional network of training and research institutions in biological oceanography, chemical oceanography, physical oceanography, marine geology and ocean engineering. Preliminary studies on the establishment of national and multinational institutions for the development of marine science and technology will be carried out.

B. Organization

25.62 Secretariat: the secretariat unit responsible for this programme is the Resources of the Sea Unit of the Natural Resources Division of the Economic Commission for Africa which had no established posts as at 1 January 1982.